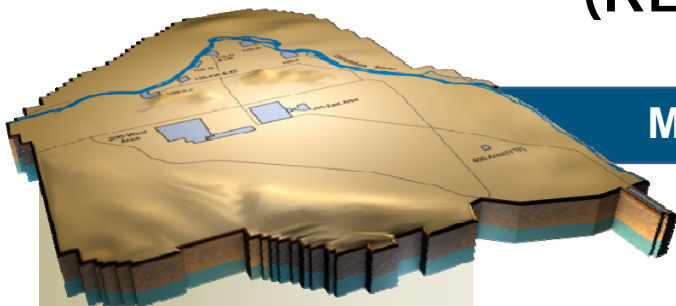


Section B Spent Nuclear Fuel Stabilization and Disposition (RL-0012)

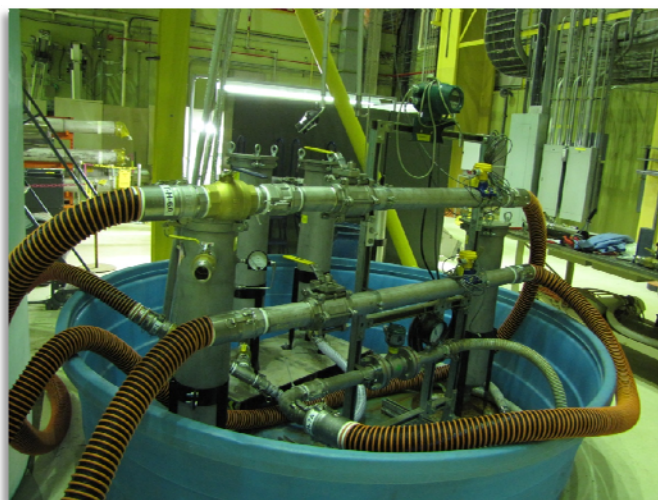
Monthly Performance Report



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October 2009
DOE/RL-2008-69, Rev. 12
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1



Knockout Pot Process Flow Equipment



Knockout Pot Drum Tumbler Setup

PROJECT SUMMARY

DOE completed the STP Phase 1 Onsite Technology Readiness Assessment. Four critical technology elements (CTEs) were identified by the team. All four of these CTEs received a technology readiness level (TRL) score of 4, which is better than the TRL 3 score that was required for approval at Critical Decision 1. CHPRC had performed a self assessment prior to this TRA, identifying 19 CTEs, all of which were assessed at equal to or greater than TRL-3. Recommendations and conclusions of the TRA team endorsed the current project scope and plans for advancing the technology with no new required actions.

The STP team received the Draft Engineering Container Sludge Disposition TRA report from DOE for factual accuracy review. CHPRC STP team, in a response for an expedited turnaround, responded with comments to DOE within the week.

STP Engineers and Construction Services, with support from 100K operations personnel, completed the installation of the Settler Tank Sludge Retrieval systems, and initiated Construction Acceptance Testing of the skids.

STP held an information session at WSU Tri-Cities with six vendors who expressed interest in participating in the Phase 2 of the project which is an alternative evaluation demonstration (treatment and packaging of engineered containers/settler tank sludge).

TARGET ZERO PERFORMANCE

	CM Quantity	FYTD Quantity	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	3	3	<p>On 10/31/09 a carpenter was struck in the back by a board. The employee was transported to AMH for evaluation where he received minor first aid. The employee was returned to work without restriction. (20527)</p> <p>On 10/27/09 a teamster reported discomfort in his back. The teamster was evaluated at AMH and returned to work with a 20-lb lifting restriction. This injury is believed to be an aggravation of pre-existing upper back injury. (20002)</p> <p>On 10/07/09 a NCO received a minor scratch on the left forearm when the arm contacted a white board marker tray. The employee and supervision consulted and the option to self-treat was selected. (20561)</p>
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

12.16 Sludge Treatment Project (STP)




- EPA and DOE have approved KBC-40467 Rev 1, Quality Assurance Project Plan/Sampling and Analysis Plan (QAPjP/SAP) for Containerized KW Settler Tank Sludge Sampling.
- STP has received five bids to modify Maintenance and Storage Facility (MASF) to install a mock-up pool of the 100K West Basin. The project team initiated the proposal evaluations and subsequent contract award will be issued the first week of November.
- STP Engineering organization met with DOE representatives to finalize the definition of the CD-1 package and Conceptual Design Report contents.
- STP issued the Project Execution Plan (PEP).
- STP initiated testing of KOP processing systems at MASF.




MAJOR ISSUES













None identified.

RISK MANAGEMENT STATUS

RL Risk
Risk Passed
New Risk

 Working - No Concerns
 Working - Concern
 Working - Critical

 Increased Confidence
 No Change
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
KBC-022: Drawing Unavailability/Errors Cause Work Stoppage During Utility Isolation	Reroute utilities to prevent this scenario. Reconfiguration work planned during ARRA period.			No new issues at this time.
STP-030: 100K KOP system operations	Refurbish IWTS, FRS, CLS to minimize operational downtime			Baseline includes refurbishment.
STP-007: Competing K Basin Priorities	Integrated, detailed working schedules/plan-of-the-week meetings			Close interactions between the projects is occurring, schedules are reviewed and evaluated, against established priorities.
STP-075: Technology Maturation Testing	Extensive testing at MASF to demonstrate appropriate technology readiness levels (TRL)			CHPRC Technology Assessment evidence packages prepared, reviewed by the JTG and DOE for TRL - 17 have been completed.
STP-018: STP Operational Upset or Spill at K West Basin	Testing of tools/processes at MASF and operator training is progressing			Washing/sorting of final 6 PCM/PPT/IWTS canisters remains. KOP (proper) material has been washed.
KBC-002: Subcontract change orders/claims exceed planned allowances	Risk accepted without mitigation			No issues at this time.

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
KBC-009: Jurisdictional Issues (Davis-Bacon) Impact Productivity	Risk handling options being evaluated	●	↔	No impacts at this time.
KBC-010: Unexpected TRU Debris or Other Waste	Develop characterization & blending/packaging strategy; establish alternate waste disposition pathways	●	↑	Completed shipment of Legacy CERCLA waste in October, increasing the confidence trend.
KBC-011: DSA/FHA Limits Impact Waste Staging	Modify DSA/FHA to increase combustible loadings	●	↔	Work in this area is proceeding without impact.
KBC-018: Discovery of Additional Sludge or SNF	Ensure SNF handling capabilities and WCH agreements are in-place	●	↑	With completion of KOP / Canister washing with no surprises, confidence level increased for this risk area.
STP-005: STP Settler Tank Retrieval	Develop multiple retrieval tools, and bounding simulant, to test most adverse conditions expected in Settler Tanks.	●	↑	Based on Boroscope inspection, material is like current simulant and additional testing will not be required.
KBC-014: Increased Radiological Controls Required for KE and KW Basin D4	Dose rates encountered during the Phase IV excavation required an increase in Administrative Control Limits for Heavy Equipment Operators (HEOs); additional shielding; and additional HEOs to complete the work.	●	↑	Risk realized at KE Basin; impacts documented in BCR-012-09-005.
PRC-042: Resource Availability	Conduct job fairs; contract with alternate resource providers; develop training programs and work with local educational facilities and union halls to train required job specialties; establish company-wide prioritization for resource assignments	●	↑	RCT impacts continue to be realized, but newly trained RCTs being placed into projects.
KBC-004: Contamination Depth Greater Than Planned, Increasing Waste Volumes to ERDF	RL Risk - No mitigation	●	↔	Potential for increased excavation depth and/or extent being monitored at this time.
KBC-035: ERDF Packaging Can Shortage	RL Risk - No mitigation	●	↓	Container availability limitations continued through October; requires continued mitigation.
PRC-044: ERDF Not Available for PRC Waste	RL risk. Note that ERDF has modified off-load procedures, began dumping containers in the queue, and resumed container shipments.	●	↔	Risk realized at KE Basin; impacts documented in BCR-012-09-005. RL provided additional funding for recovery from ERDF impacts.
KBC-008: D4 Delays Impact 100K Waste Site Cleanup	Plan/Schedule Monitor progress. Manage the project and its interfaces to prevent or minimize this risk. (Logistics in schedule) May need to have other workscope planned & ready to allow work-arounds.activities are delayed.	●	↔	Project was able to meet the remediation start dates in September; later than planned start will be carried into FY 2010.

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)
Base	4.7	4.1	4.8	(0.6)	-12.9	(0.7)	-17.0	532.6

Numbers are rounded to the nearest \$0.1M.

CM Schedule Performance (-\$0.6M/-12.9%)

The STP negative variance (-\$0.6M) is due to: 1) additional testing at PNNL, requested by engineering, to understand the settling times of the sludge (with and without flocculant) for the loading/decanting of the STSCs, which has delayed the characterization report on the K East sludge (SCSs 240, 250 and 260) and K West sludge from SCSs 210 (-\$0.3M). 2) the BCWS for the knockout pot (KOP) workscope that was completed in FY 2009 is now catching up, creating a negative schedule variance in both the KOP Phase 4 activities and the KOP design activities (-\$0.3M). 3) the project did not start the refurbishment of the Multi-Canister Overpack (MCO) processing systems as planned (late start), as STP and 100K Operations are reviewing all systems to ensure that CHPRC prudently make these investments (-\$0.2M). 4) and finally, these negative variances are offset by the positive schedule variance for the installation and initiation of Construction Acceptance Test (CATs) for the Settler Tank Retrieval systems (+\$0.2M). (Note: during the Pump skid Construction Acceptance Test, the Settler Tank Retrieval Pump failed.)

CM Cost Performance (-\$0.7M/-17.0%)

The 100K Area negative variance (-\$0.4M) is due to K Basins Operations personnel staffed and budgeted as “ready to serve” K West operations activities and STP in-basin activities. These resources were underutilized by STP. Additionally, labor for cold and dark isolation of facilities was erroneously charged to 100K Facility Operations and support. Time cards will be corrected and re-submitted.

The STP negative variance (-\$0.3M) is due to: 1) The additional settling tests at PNNL, along with a failed test which required some re-work (-\$0.2M), 2) KOP systems refurbishment did not start as scheduled as STP and 100K Operations personnel are still performing systems evaluation (-\$0.1M).

Contract-to-Date (\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)
Base	102.3	104.0	104.3	1.7	1.7	(0.3)	-0.3	532.6

Numbers are rounded to the nearest \$0.1M.

CTD Schedule Performance (+\$1.7M/+1.7%)

The STP positive variance (+\$1.7M) CTD is due to: 1) early planned completion of the KOP 4 Phase In-Basin inspections, including the washing of the three KOP streams (+\$1.1M); 2) early start and advancement of the KOP Conceptual Design (+\$0.4); and 3) early start on the testing of the KOP retrieval and separations systems at MASF (+\$0.2M).

CTD Cost Performance (-\$0.3M/-0.3%)

The negative variance within 100K (-\$3.1M) has three main components: 1) the impact to demolition and waste shipments from the K East Basin excavation has a variance of (-\$1.2M). The effort was completed in FY 2009. 2) K West Basin Operations (-\$2.2M) impacts remaining from implementation of operational controls after a PISA was declared preventing the operation of the IWTS in the K West Basin in prior months and unplanned cost to maintain aging facilities in the 100K Area. These negative variances were offset by efficient performance in other accounts.

The STP positive variance (+\$2.3M) CTD is due to: 1) efficiencies in testing support and materials for the EC/ST Retrieval, Transport and Storage systems and MASF facility costs have been less than planned to support a TRL-3 assessment (+\$0.8M); 2) early completion of the KOP 4 Phased In-Basin inspections required less 100K operations support (+\$0.8M); 3) early completion on both the KOP Alternatives Analysis and debris disposition documents (+\$0.2M); and 4) success of inspection system allowed for fewer design engineering resources (+\$0.5M).

The assessment accounts (WBS 12.98 and 12.99) have a favorable variance (+\$0.5M) which is within established thresholds.

Contract Performance Report Formats are provided in Appendix A.

FY 2010 FUNDS VS. SPEND FORECAST (\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY 2010		Variance
	Projected Funding	Spending Forecast	
Base	84.7	81.5	3.3

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Projected Funding includes FY 2009 uncosted and FY 2010 expected new Budget Authority (BA).

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Estimate at Completion

The BAC and EAC now include FY 2009 through FY 2018, the PRC contract period.

Baseline Change Requests

See Overview.

MILESTONE STATUS

TPA milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comment
DNFSB 120W	Complete Sludge Treatment	DNFSB	11/30/09			

SELF-PERFORMED WORK

The Section H.20 clause entitled, Self-Performed Work, is addressed in the Monthly Report Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.